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# PART 70 TECHNICAL SUPPORT DOCUMENT (STATEMENT of BASIS)

# APPLICATION FOR: **Part 70 Operating Permit Renewal with Revisions**

SUBMITTED BY: Broadbent & Associates, Inc.

FOR:

Caesars Entertainment Corporation
Source ID: 257

#### **LOCATION:**

1 Caesars Palace Drive. Las Vegas, Nevada 89109

SIC code 7011, "Hotels and Motels" NAICS code 721120, "Casino Hotels"

TSD Date: September 7, 2021

#### **EXECUTIVE SUMMARY**

Caesars Consolidated Properties (Caesars) is a major stationary source for NO<sub>x</sub> (nonattainment), a major Part 70 source for CO, and a minor source for all other regulated air pollutants. The source is also identified as a major source of greenhouse gases (GHGs). It is located at 1 Caesars Palace Drive, Las Vegas, Nevada, in the Las Vegas Valley (Hydrographic Area 212). Hydrographic Area 212 is designated as attainment for all regulated air pollutants except ozone and was designated a marginal nonattainment area for ozone on August 3, 2018. The designation has not imposed any new requirements at this time. HA 212 is also subject to a maintenance plan for the CO and PM<sub>10</sub> NAAQS.

Caesars owns and operates several adjacent and contiguous hotels and casinos grouped under SIC code 7011, "Hotels and Motels" (NAICS code 721120, "Casino Hotels"). The source is operating eleven facilities: Harrah's Las Vegas, Flamingo Las Vegas, Bally's Las Vegas, The Cromwell Las Vegas, Caesars Palace, Paris Casino Resort, The LINQ Hotel & Casino, Planet Hollywood, LINQ Complex – High Roller, Battista's, and the Forum Meeting Center. Caesars is not a categorical Stationary Source, as defined by AQR 12.2.2(j).

The Clark County Department of Environment and Sustainability, Division of Air Quality (DAQ) has permitting responsibilities for all emission units at the source, which include boilers, diesel generators and fire pumps, cooling towers, spray booths, gasoline dispensing operations, and woodshops. The permitting history of this source reflects changes in air quality permitting practices, both at the local and federal levels, in response to changing environmental regulations. This is a renewal of the Part 70 Operating Permit (OP).

The potential emissions for the source are shown in the table below.

Source PTE (tons per year)

-	PM <sub>10</sub>	PM <sub>2.5</sub>	NOx	СО	SO <sub>2</sub>	VOC	HAP	GHG
PTE	68.99	68.99	440.11	186.53	2.28	26.76	6.03	288,439.90
Major Part 70 Source Thresholds (Title V)	100	100	100	100	100	100	10/25 <sup>1</sup>	-
Major Stationary Source Thresholds (PSD)	250	250	-	250	250	-	10/25 <sup>1</sup>	-
Major Stationary Source Threshold (Nonattainment)	-	-	100	-	-	100	-	-

<sup>&</sup>lt;sup>1</sup>10 tpy for single HAP and 25 tpy for combined HAP.

DAQ has been delegated the authority to implement the requirements of the Part 70 operating permit program.

Based on the information submitted by the applicant and a technical review performed by DAQ staff, DAQ proposes a renewal of the Part 70 OP for Caesars.

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#### I. ACRONYMS AND ABBREVIATIONS

#### Table I-1. Acronyms

**Acronym** Clark County Air Quality Regulation **AQR** ATC

Authority to Construct

CAAA Clean Air Act Amendments

cfm cubic feet per minute

**CFR** Code of Federal Regulations

CO carbon monoxide DAQ Division of Air Quality

DES Department of Environment and Sustainability

EPA U.S. Environmental Protection Agency

EU emission unit

GHG greenhouse gases gallons per minute gpm HAP hazardous air pollutant

hp horsepower kW kilowatt

MMBtu Millions of British thermal units

**NAAQS** National Ambient Air Quality Standards

**NAICS** North American Industry Classification System

 $NO_x$ nitrogen oxides

NRS **Nevada Revised Statutes** 

 $PM_{2.5}$ particulate matter less than 2.5 microns in diameter  $PM_{10}$ particulate matter less than 10 microns in diameter

ppm parts per million

ppmvd parts per million, volumetric dry

**PSD** Prevention of Significant Deterioration

PTE potential to emit

RICE reciprocating internal combustion engine

SCC Source Classification Codes SIC Standard Industrial Classification

 $SO_2$ sulfur dioxide

**TDS** total dissolved solids

VOC volatile organic compound

#### II. SOURCE INFORMATION

#### A. General

Permittee	Caesars Entertainment Corporation			
Address (Mailing/Billing):	One Caesars Palace Drive, Las Vegas, NV 89109			
Source Name:	Caesars Consolidated Properties			
Source Address:	Harrah's Las Vegas, 3475 S. Las Vegas Blvd.			
	Flamingo Las Vegas, 3555 S. Las Vegas Blvd.			
	Bally's Las Vegas, 3645 S. Las Vegas Blvd.			
	The Cromwell Las Vegas, 3595 S. Las Vegas Blvd.			
	Caesars Palace, 3570 S. Las Vegas Blvd.			
	Paris Casino Resort, 3655 S. Las Vegas Blvd.			
	The LINQ Hotel & Casino, 3535 S. Las Vegas Blvd.			
	Planet Hollywood, 3667 S. Las Vegas Blvd.			
	LINQ Complex – High Roller, 3545 S. Las Vegas Blvd.			
	Battista's, 4041 Audrie St.			
	Forum Meeting Center, 3911 Koval Lane			
Contact:	Tracey Hudson, Vice President of Risk Management			
Telephone Number:	(775) 348-3343			
Email:	thudson1@caesars.com			

#### **B.** Source Description

The Caesars Entertainment Corporation operates the source, Caesars Consolidated Properties. The properties are hotel and casino facilities with a convention center. For all of the potential emission sources, the key processes are heating and cooling both water and air with boilers and cooling towers, and using emergency generators to produce electricity when necessary. There are ancillary activities, such as carpentry and spray painting for which dust collectors and paint spray booths are used. All boilers and heaters utilize natural gas and emergency generators use ultra-low sulfur diesel fuel. Cyclones, dust collectors, and paint spray booths are operated on electricity.

Caesars is a major stationary source for NO<sub>x</sub>, a major Part 70 source for CO and a minor source for all the other regulated air pollutants.

#### C. Permitting Action

The permittee submitted an application on September 25, 2020, for a renewal to the Part 70 OP and to make the following changes:

- 1. Install a new diesel-fired emergency generator at The LINQ Hotel & Casino (EU: IP38).
- 2. Remove the operational limitations for three boilers at Bally's Las Vegas (EUs: BA01 through BA03), five boilers at Caesars Palace (EUs: CP01 through CP05), and three boilers at The LINQ Hotel & Casino (EUs: IP01 through IP03) to allow each unit to operate 8,760 hours per year.
- 3. Remove two cooling towers that were previously located at The LINQ Hotel & Casino (EU: IP24 and IP37).

- 4. Update the emission unit identification information as listed in Table II-C-1.
- 5. Add, remove, or update the identification information for various insignificant activities. The updated list is in Table V-1 in the appendix of this document. The removed insignificant activities are listed in Table V-2.
- 6. Set the  $PM_{2.5}$  emissions equivalent to  $PM_{10}$  emissions for all cooling towers, in accordance with options given in current DAQ policy.

The source requested to update the serial number for another boiler at Caesars Palace (EU: CP37), but this information was corrected in the previous permitting action.

The source submitted an application for a significant revision on November 20, 2020, to incorporate the Planet Hollywood central plant units (EUs: PH07 through PH14) into this Part 70 OP. These units were previously permitted under Northwind Aladddin LLC (Source #26). The revised Part 70 permit was issued on June 23, 2021 and the corresponding changes were included in this renewal.

The source sent notification on January 14, 2021, that two boilers at Paris Las Vegas (EU: PA29 and PA30) were replaced with like-in-kind boilers. This only requires updating the serial number as the make, model, and ratings are unchanged.

Table II-C-1: Updated Emission Units

EU	Description	Rating	Manufacturer	Model No.	Serial No.	SCC	
HA13	Emergency Generator	800 kW	Marathon Electric Generator	573RSL2056A- P266W <sup>1</sup>	VE3575357	20300101	
	Generator	1,232 hp	Detroit Diesel Engine	1 81637/116   16VEDD7U6			
BA17	Emergency Fire	526 hp	Clarke Fire Pump	JX6H- UFADK0-D <sup>1</sup>		20300101	
DATI	Pump	320 Hp	John Deere Engine	6135HFC48A	RG6135L023246	20300101	
BA18	Emergency Fire	526 hp	Clarke Fire Pump	JX6H- UFADK0-D <sup>1</sup>		20300101	
DATO	Pump	320 Hp	John Deere Engine	6135HFC48A	RG6135L022100	20300101	
CP21	Cooling Tower	5,750 gpm	Baltimore Aircoil	3725A-4 <sup>1</sup>	U040665202MAD	38500101	
CP22	Cooling Tower	5,750 gpm	Baltimore Aircoil	3725A-5 <sup>1</sup>	U040665203MAD	38500101	
CP41	Natural Gas Water Heater	0.25 MMBtu/hr	A.O. Smith	BTH250A200 <sup>1</sup>	1615M000633 <sup>1</sup>	10300603	
PA29 <sup>2</sup>	Natural Gas Boiler	1.95 MMBtu/hr	RBI Futera II	FW1950	092086486	10300603	
PA30 <sup>2</sup>	Natural Gas Pool Heater	1.95 MMBtu/hr	RBI Futera II	FW1950	092084697	10300603	

<sup>&</sup>lt;sup>1</sup>Updated Information.

<sup>&</sup>lt;sup>2</sup>Like-in-kind replacement.

**Table II-C-2: New Emission Units** 

EU	Rating	Туре	Manufacturer	Model No.	Serial No.	SCC
	500 kW	Genset – Emergency	Caterpillar	LC6	G6B25666	
IP38	762 hp	Engine – Diesel DOM: 11/01/2019	Caterpillar	C15	FTE04081	20300101

Note: DOM: date of manufacture; hp: horsepower; kW: kilowatt; gpm: gallons per minute; MMBtu: millions of British thermal units..

During review of the draft documents, the source stated that an emergency generator at Harrah's (EU: HA24) and a fire pump (EU: CP18) were removed.

DAQ has identified this source as possibly emitting 25 tons or more of actual emissions for oxides of nitrogen (NOX) and/or volatile organic compounds (VOCs) in any calendar year. Clark County was required to implement Section 182(a)(3)(B) of the Clean Air Act (CAA) which requires all ozone nonattainment areas to have in place a program that requires emissions statements from stationary sources of NOX and/or VOCs.

Section 12.9.1 of the Clark County Air Quality Regulations (AQRs) codifies this requirement for Clark County and states the following:

- a. The Responsible Official of each Stationary Source that emits 25 tons or more of NOx and/or VOC shall submit an Annual Emissions Statement (Statement) to the department for the previous calendar year.
- b. Pursuant to CAA Section 182, the Statement must include all actual emissions for all NO<sub>X</sub> and VOC emitting activities.
- c. The Statement shall be submitted to and received by the department on or before March 31 of each year or other date, upon prior notice by the Control Officer, and shall include a certification that the information contained in the Statement is accurate to the best knowledge of the individual certifying the Statement.

A condition requiring submittal of annual emission statement has been included in the permit.

#### D. Operating Scenario

Caesars properties are all hotel and casino facilities and a convention center. Each facility operates 8,760 hours per year. Permitted operating hours and production limits for each emission unit were provided by the permittee.

#### E. Proposed Exemptions

Caesars has proposed additional insignificant emission units. The current list of insignificant emission units is found in the appendix of this document.

#### III. EMISSION IFORMATION

#### A. Total Source Potential to Emit

The calculated source PTE and emission increase are presented in tables below.

Table III-A-1: Source PTE (tons per year)

Facility	PM <sub>10</sub>	PM <sub>2.5</sub>	NOx	СО	SO <sub>2</sub>	voc	HAP
Harrah's	3.75	3.75	39.20	14.90	0.17	2.86	0.41
Flamingo	6.03	6.03	36.92	18.22	0.22	2.40	0.58
Bally's	4.97	4.97	47.06	13.23	0.21	2.63	0.55
The Cromwell	0.96	0.96	11.56	3.91	0.08	0.81	0.16
Caesars Palace	21.83	21.83	131.68	34.47	0.72	7.94	2.07
Paris	9.83	9.83	45.83	35.71	0.29	3.02	0.79
The LINQ Hotel & Casino	2.17	2.17	36.28	18.67	0.19	1.82	0.34
Planet Hollywood	12.48	12.48	63.64	37.22	0.22	3.37	0.64
LINQ Complex – High Roller	5.60	5.60	23.20	5.93	0.10	1.09	0.27
Forum Meeting Center	1.38	1.38	4.77	4.29	0.09	0.82	0.21
Totals	68.99	68.99	440.11	186.53	2.28	26.76	6.03
Major Source Thresholds	100	100	100 <sup>1</sup>	100	100	<b>100</b> <sup>1</sup>	<b>25/10</b> <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Marginal nonattainment for ozone.

Table III-A-2: Permitting Action Emissions Increase (tons per year)

Pollutant	PM <sub>10</sub>	PM <sub>2.5</sub>	NOx	СО	SO <sub>2</sub>	VOC	HAP
New Unit Increase (EU: IP38)	0.02	0.02	2.07	0.49	0.01	0.02	0.01
Planet Hollywood Units	12.48	12.48	63.64	37.22	0.22	3.37	0.64
Planet Hollywood Emissions Increase	3.42	3.42	0.00	0.00	0.00	0.00	0.00
Modified Units Increases	2.45	2.45	11.35	4.53	0.18	1.79	0.62
Total Emissions Increases	5.89	5.89	13.42	5.02	0.19	1.81	0.63
Removed Units (EUs: HA24, CP18, IP24, and IP37)	0.48	0.48	5.66	1.22	0.17	0.46	0.01
Minor NSR Significance Levels	7.5	5	20	50	20	20	N/A
Major Source Significance	15	10	40	100	40	40	-

The Planet Hollywood units (formerly permitted under Northwind Aladdin Source #26) are added as a consolidation of the Planet Hollywood with the current Caesars properties. These units are not part of the emissions increase, except for the increase in TDS of the cooling tower (EU: PH14) that was requested during the consolidation.

Table III-A-2 shows that the emissions increases in this permitting action are below all significance thresholds, therefore controls analyses are not required.

The source PTE is based on 8,760 hours of operation per year for all permitted boilers, water heaters, and cooling towers, and the emergency units' PTE is based on 500 hours of operation per year. Therefore, the PTE of these units are their SDE. Similarly, the GDO's permitted throughput is used for PTE and SDE calculations. The emissions from the insignificant boilers and water

<sup>&</sup>lt;sup>2</sup>25 tons for combination of all HAPs (no single HAP exceeds 10 tons).

heaters are added to the source PTE to calculate the source SDE. The insignificant dust collectors, paint booths, and diesel tanks are included in the SDE calculation based on their normal production.

Table III-A-3 lists the source's SDE and shows that the insignificant units do not make the source major for any additional pollutant.

Table III-A-3: Source SDE (tons per year)

Pollutant	PM <sub>10</sub>	PM <sub>2.5</sub>	NOx	CO	SO <sub>2</sub>	voc	HAP
Source PTE	68.99	68.99	440.11	186.53	2.28	26.76	6.03
SDE of Insignificant Units	2.87	2.87	2.76	2.55	0.11	3.96	0.28
Source SDE	71.86	71.86	442.87	189.08	2.39	30.72	6.31
Major Stationary Source Thresholds (Title V)	100	100	100¹	100	100	100 <sup>1</sup>	10/25 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Nonattainment area thresholds as well.

#### **B.** Control Technology

Caesars requested to remove the hour limitations on eleven boilers (EUs: BA01 through BA03, CP01 through CP05, and IP01 through IP03). All boilers were originally permitted to meet BACT at 8,760 hours, when originally installed. Therefore the hour limits were not part of the original BACT analysis and a controls analysis is not required to remove the hour limits in this action.

The new emergency generator (EU: IP38) is not subject to RACT, but is equipped with a turbocharger and aftercooler.

The Planet Hollywood units (EUs: PH07 through PH14), added with the significant revision application submitted November 20, 2002, are not subject to a controls analysis as these units were existing prior to being consolidated into Caesars Part 70 OP.

#### **C.** Production Limitations

The boilers and cooling tower are permitted to operate 8,760 hours per year. The emergency generators and fire pumps are permitted to operate 100 hours per year for testing and maintenance per 40 CFR Part 60, Subpart IIII, and 40 CFR Part 63, Subpart ZZZZ, and unlimited during emergencies. The gasoline storage tank (EU: CP32) is limited to 18,000 gallons per year.

#### **D.** Compliance Demonstration

Standard conditions remain in the permit for new and existing emission units. Hour meters are required for all emission units limited by hours, where practical. The permittee is required to keep records of generator operation; natural gas usage for boilers and water heaters (EUs: FL01 through FL04, BA01 through BA03, CP01 through CP05, CP26, CP27, PA14 through PA16, IP04, IP05, and PH07 through PH09) subject to 40 CFR Part 60, Subpart Dc; burner efficiency tests; performance tests; gasoline throughput (EU: CP32); TDS content of cooling tower recirculation water; visible emissions checks; and inspections, maintenance, and repairs specified by the permit.

<sup>&</sup>lt;sup>2</sup>10 tpy for single HAP and 25 tpy for combined HAP.

Opacity limits remain unchanged in this permitting action. Visible emission check language has been updated to DAQ's current policy.

#### **E.** Performance Testing

Boiler efficiency tests apply to the boilers greater than 4.0 MMBtu/hr and performance tests apply to boilers greater than 10.0 MMBtu/hr. These requirements are in the Part 70 OP and have not changed in this permitting action.

#### F. Public Participation

Public participation is required for a renewal under AQR 12.5.2.17.

#### G. Increment

Caesar's Entertainment Corporation is a major source in Hydrographic Area 212 (the Las Vegas Valley). Permitted emission units include 66 boilers, 49 generators and 28 cooling towers. Since minor source baseline dates for NO<sub>x</sub> (October 21, 1988) and SO<sub>2</sub> (June 29, 1979) have been triggered, Prevention of Significant Deterioration (PSD) increment analysis is required.

DAQ modeled the source using AERMOD to track the increment consumption. Average actual emissions (2019-2020) were used in the NOx modeling. Stack data submitted by the applicant were supplemented with information available for similar emission units. Five years (2011 to 2015) of meteorological data from the McCarran Station were used in the model. U.S. Geological Survey National Elevation Dataset terrain data were used to calculate elevations. Table III-G-1 shows the location of the maximum impact and the potential PSD increment consumed by the source at that location. The impacts are below the PSD increment limits.

**Table III-G-1: PSD Increment Consumption** 

Pollutant	Averaging	Source's PSD Increment	Location of Maximum Impact			
Pollularii	Period	Consumption (µg/m³)	UTM X (m)	UTM Y (m)		
SO <sub>2</sub>	3-hour	4.09 <sup>1</sup>	664850	3998350		
SO <sub>2</sub>	24-hour	1.46 <sup>1</sup>	663850	3998650		
SO <sub>2</sub>	Annual	0.78	663850	3998850		
NO <sub>X</sub>	Annual	3.27	664650	3998650		

<sup>&</sup>lt;sup>1</sup> Second High Concentration.

#### IV. REGULATORY REVIEW

#### A. Local Regulatory Requirements

DAQ has determined that the following public laws, statutes, and associated regulations are applicable:

- 1. CAAA (authority: 42 U.S.C. § 7401, et seq.);
- 2. Title 40 of the CFR, including 40 CFR Part 70 and others;
- 3. Chapter 445 of the NRS, Sections 401 through 601;

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- 4. Portions of the AQR included in the state implementation plan (SIP) for Clark County, Nevada. SIP requirements are federally enforceable. All requirements from ATC permits issued by DAQ are federally enforceable because these permits were issued pursuant to SIP-included sections of the AQR; and
- 5. Portions of the AQR not included in the SIP. These locally applicable requirements are locally enforceable only.

#### **B.** Federally Applicable Regulations

#### 40 CFR Part 60 (NSPS), Subpart A—General Provisions

#### 40 CFR §60.7: Notification and recordkeeping.

**Discussion:** This regulation requires notification to DES of modifications, opacity testing, and records of malfunctions of process equipment, and performance test data. These requirements are found in the Part 70 OP in Section III. DAQ requires records to be maintained for five years, a more stringent requirement than the two years required by 40 CFR Part 60.7.

#### 40 CFR §60.8: Performance tests.

**Discussion:** Notice of intent to test, the applicable test methods, and acceptable test method operating conditions are outlined in this regulation. DES also reserves the right to require more frequent testing.

#### 40 CFR §60.11: Compliance with standards and maintenance requirements.

**Discussion:** Caesars is subject to two NSPS standards: Subpart Dc, Standards for Performance for Small Industrial-Commercial-Institutional Steam Generating Units and Subpart IIII, Standards for Performance for Stationary Compression Ignition Internal Combustion Engines. Compliance requirements for these standards are discussed in corresponding sections.

#### 40 CFR §60.12: Circumvention.

**Discussion:** This prohibition is addressed in the Part 70 OP. There is also a local rule, AQR 80.1.

40 CFR Part 60, Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

#### 40 CFR §60.40c: Applicability and Delegation of Authority

**Discussion:** The boilers (EUs: FL01 through FL04, BA01 through BA03, CP01 through CP05, CP26, CP27, PA14 through PA16, IP04, IP05, and PH07 through PH09) are each rated above 10 MMBtu per hour; therefore, Subpart Dc is applicable to these emission units.

#### 40 CFR §60.42c: Standard for Sulfur Dioxide

**Discussion:** This section does not pertain to boilers that exclusively fire natural gas.

#### 40 CFR §60.43c: Standard for Particulate Matter

**Discussion:** This section does not pertain to boilers that exclusively fire natural gas.

#### 40 CFR §60.48c: Reporting and Recordkeeping Requirements

**Discussion:** These are addressed in Sections III-B-7, III-C-7, III-E-7, III-F-7, III-G-7, and III-H-7 in the Part 70 operating permit.

# 40 CFR Part 60, Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

#### 40 CFR §60.4200: Applicability determination.

**Discussion:** The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) with a displacement less than 30 liters per cylinder where the model year is 2007 or later, for engines that are not fire pumps, and July 1, 2006, for ICE certified by National Fire Protection Association as fire pump engines. Caesars operates emission units that are subject to this subpart.

#### 40 CFR §60.4202: Emission standards for owners and operators.

**Discussion:** The operator of the stationary CI ICE must provide the manufacturer certification of the emission standards specified in this subpart. These requirements are addressed in the Part 70 OP. By meeting the manufacturer's certified emissions, the emission units are in compliance with the emission standards of this subpart.

#### 40 CFR §§60.4206 and 60.4211: Compliance requirements.

**Discussion:** The operator of the stationary CI ICE must operate and maintain CI ICE that achieve the emission standards according to the manufacturer's written instructions and procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. These requirements are addressed in the Part 70 OP.

#### 40 CFR §60.4214: Reporting and recordkeeping requirements.

**Discussion:** The operator of the CI ICE shall keep records that include: engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; emission control equipment; and fuel used. If the stationary CI internal combustion is a certified engine, the owner or operator shall keep documentation from the manufacturer that the engine is certified to meet the emission standards. These requirements are addressed in the Part 70 OP.

# 40 CFR Part 63, Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

#### 40 CFR §63.6585: Applicability determination.

**Discussion:** The provisions of this subpart are applicable to owners and operators of stationary RICE at major or area sources of HAP. Numeric emission standards are not applied to these emergency engines, however, operational limitations, management practices and record keeping are required. Some of the engines (EUs: FL26, BA17, BA18, CR07, CR08, CP28, CP29, CP34, CP35, IP38, PH13, LI06, LI07, LI12, LI13, and FMC05) meet the requirements of 40 CFR Part 63, Subpart ZZZZ, by complying with 40 CFR Part 60, Subpart IIII.

#### 40 CFR §63.6603: Compliance requirements.

**Discussion:** Owners and operators of existing emergency RICE must install an hour meter on the engine to demonstrate that the operating limitations imposed by the definition of an emergency generator are being met (Table 2b of the subpart). Records must be kept to demonstrate the management practices are being followed (Table 2d of the subpart). These requirements are addressed in the Part 70 OP.

# 40 CFR Part 63, Subpart CCCCCC—National Emissions Standards for Hazardous Air Pollutants for Stationary

#### 40 CFR §63.11111: Applicability.

**Discussion:** This section defines the various requirements for automotive and aviation gasoline dispensing facilities.

#### 40 CFR §63.11112: Affected Emission Units.

**Discussion:** This subpart applies to gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDO. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at the GDO are also included. The equipment used for the refueling of motor vehicles is not covered by this subpart.

#### 40 CFR §63.11113: Compliance Dates.

**Discussion:** This section establishes the dates for which all existing, reconstructed, and new affected sources must comply with the requirements of this subsection.

#### 40 CFR §63.11115: General Duties for Minimizing Emissions.

**Discussion:** The permittee shall, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

# 40 CFR §63.11116: Requirements for Facilities with Monthly Throughputs of less than 10,000 Gallons.

**Discussion:** This section addresses the means by which gasoline shall be handled to minimize vapor releases to the atmosphere. All pertinent requirements are contained in the Part 70 Operating Permit.

#### 40 CFR §63.11120: Testing and Monitoring Requirements.

**Discussion:** All applicable testing and monitoring requirements, from this subsection, are addressed in the Part 70 Operating Permit.

#### 40 CFR §63.11125: Recordkeeping Requirements.

**Discussion:** All applicable notification requirements are addressed in the part 70 Operating permit.

# 40 CFR Part 63, Subpart Q—National Emissions Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers

#### 40 CFR §63.400: Applicability.

**Discussion:** This subpart does not apply to the cooling towers at Caesars, as chromium-based water treatment chemical are not used in these units, and Caesars is not a major source of HAP.

#### 40 CFR Part 64—Compliance Assurance Monitoring

#### 40 CFR §64.2: Applicability.

**Discussion:** CAM does not apply to any emission unit at Caesars as no emission unit is subject to an emission limitation or standard, has an uncontrolled PTE greater than a major source threshold, and uses that control device to achieve compliance with the emission standard.

#### 40 CFR Part 72—Acid Rain Permits Regulation

#### 40 CFR §72.6: Applicability.

**Discussion:** There is no emissions unit at this source that meets the definition of affected unit under this rule, therefore, 40 CFR Part 72 does not apply to this source.

#### 40 CFR 75—Continuous Emission Monitoring

**Discussion:** This source is not subject to the Acid Rain limitations of 40 CFR Part 72, therefore, the source is not subject to the monitoring requirements of this regulation.

No new regulations apply to Caesars as a result of this permitting action. Existing applicable regulations are unchanged.

The new emergency engine (EU: IP38) is subject to 40 CFR Part 60, Subpart IIII, and is subject to the emission standards in Table IV-B-1. The emission standards for all engines subject to 40 CFR Part 60, Subpart IIII, are listed in Table IV-B-1.

Table IV-B-1: Emission Standards from 40 CFR Part 60, Subpart IIII, in g/kW-hr

EU	PM	NMHC + NOX	СО
FL26, CR07, CP28, CP29, IP38, PH13, LI06, LI07, and FMC05	0.20	6.4	3.5
BA17, BA18, CR08, CP34, CP35, LI12, and LI13	0.20	4.0	3.5

#### V. PERMIT SHIELD

Caesars specifically requested a permit shield for all requirements, which will include those of 40 CFR Part 60, Subparts Dc and IIII, and 40 CFR Part 63, Subparts ZZZZ and CCCCCC, which are in the current Part 70 OP.

Compliance with the terms contained in this permit shall be deemed compliance with the following applicable requirements in effect on the date of permit issuance:

Table V-1: Applicable Conditions Related to Permit Shield

Applicable Regulation	Title	Permit Conditions
40 CFR Part 60, Subpart Dc	Standards of Performance for New Stationary Sources (NSPS) – Small Industrial-Commercial- Institutional Steam Generating Units	III.B.5.a, III.B.7.b.i, III.C.5.a, III.C.7.b.i, III.E.5.a, III.E.7.b.i, III.F.5.a, III.F.7.b.i , III.G.5.a, III.G.7.b.i, III.H.5.a, and III.H.7.b.i
40 CFR Part 60, Subpart IIII	Standards of Performance for New Stationary Sources (NSPS) – Stationary Compression Ignition (CI) Internal Combustion Engines (ICE)	III.B.3.b, III.B.4.k, III.C.3.b, III.C.4.j, III.D.3.a, III.D.4.g, III.E.3.b, III.E.4.r, III.G.3.b, III.G.4.j, III.H.3.b, III.H.4.g, III.1.3.a, III.1.4.g, III.K.3.a, III.K.4.g
40 CFR Part 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	III.A.3.a, III.B.3.a, III.C.3.a, III.E.3.a, III.F.3.a, III.G.3.a, III.H.3.a
40 CFR Part 63, Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	III.E.4.w, III.E.5.n, III.E.7.b.iv

#### VI. COMPLIANCE

#### A. Compliance Certification

Recordkeeping requirements are to be kept for all limitations specified in the permit.

#### 1. Requirements for reporting

- a. 12.5.2.8: Requirements for compliance certification:
- i. Regardless of the date of issuance of this Part 70 OP, the schedule for the submittal of reports to DAQ shall be that in Table VI-A-1.

Table VI-A-1: Reporting Schedule

Required Report	Applicable Period	Due Date
Semiannual report for 1st six-month period	January, February, March, April, May, June	July 30 each year <sup>1</sup>
Semiannual report for 2 <sup>nd</sup> six-month period; any additional annual records required	July, August, September, October, November, December	January 30 each year <sup>1</sup>
Annual Compliance Certification	Calendar year	January 30 each year <sup>1</sup>
Annual Emission Inventory Report	Calendar year	March 31 each year <sup>1</sup>
Annual Emission Statement <sup>2</sup>	Calendar year	March 31 each year <sup>1</sup>
Notification of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emission	As required	Within 24 hours of the permittee learns of the event
Report of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emission	As required	Within 72 hours of the notification

Required Report	Applicable Period	Due Date
Deviation Report without Excess Emissions	As required	Along with semiannual reports <sup>1</sup>
Excess Emissions that Pose a Potential Imminent and Substantial Danger	As required	Within 12 hours of the permittee learns of the event
Performance Testing Protocol	As required	No less than 45 days, but no more than 90 days, before the anticipated test date <sup>1</sup>
Performance Testing	As required	Within 60 days of end of test <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> If the due date falls on a Saturday, Sunday, or federal or Nevada holiday, the submittal is due on the next regularly scheduled business day.

- ii. A statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods.
- iii. A schedule for submission of compliance certifications during the permit term.
- iv. A statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements of the Clean Air Act.

#### **B.** Compliance Summary

Table VI-B-1: Applicable Regulations

Citation	Title	Applicability	Applicable Test Method	Compliance Status
AQR Section 0	Definitions	Applicable – Caesars will comply with all applicable definitions as they apply.	Caesars will meet all applicable test methods should new definitions apply.	Caesars complies with applicable requirements.
AQR Section 4	Control Officer	Applicable – The Control Officer or his representative may enter into Caesars property, with or without prior notice, at any reasonable time for purpose of establishing compliance.	Caesars will allow Control Officer to enter Caesars properties as required.	Caesars complies with applicable requirements.
AQR Section 12.5	Part 70 Operating Permits	Applicable – Caesars is a major stationary source and under Part 70. Renewal applications are due between 6 and 18 months prior to expiration. Revision applications will be submitted within 12 months of commencing operation of the new emission unit.	Caesars submitted the initial Part 70 permit application within 12 months of startup. The renewal application was submitted within the appropriate timeframe.	Caesars complies with applicable requirements.
AQR Section 13.2(b)(82) Subpart ZZZZ	NESHAP – Stationary Reciprocating Internal Combustion Engines	Applicable – The Caesars diesel engines are the affected units.	Applicable monitoring and recordkeeping requirements.	Caesars complies with applicable requirements.

<sup>&</sup>lt;sup>2</sup> Required only for stationary sources that emit 25 tons or more of nitrogen oxide (NO<sub>X</sub>) and/or emit 25 tons or more of volatile organic compounds (VOC) during a calendar year.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
AQR Section 13.2.(b)(106) Subpart CCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	Applicable – The Caesars gasoline dispensing is the affected operation.	Applicable monitoring and recordkeeping requirements.	Caesars complies with applicable requirements.
AQR Section 14.1(b)(1) Subpart A	NSPS – General Provisions	Applicable – Caesars is an affected facility under the regulations. Sec. 14 is locally enforceable; however, the NSPS standards they reference are federally enforceable.	Applicable monitoring, recordkeeping and reporting requirements.	Caesars complies with applicable requirements.
AQR Section 14.1(b)(5) Subpart Dc	Standards of Performance for Small Industrial – Commercial – Institutional Steam Generating Units	Applicable – Caesars boilers are affected units under the regulations. Sec. 14 is locally enforceable; however, the NSPS standards they reference are federally enforceable.	Applicable monitoring, recordkeeping and reporting requirements.	Caesars complies with applicable requirements.
AQR Section 14.1(b)(81) Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Applicable – Caesars diesel engine is an affected unit under the regulations. Sec. 14 is locally enforceable; however, the NSPS standards they reference are federally enforceable.	Applicable monitoring, recordkeeping and reporting requirements.	Caesars complies with applicable requirements.
AQR Section 18	Permit and Technical Service Fees	Applicable – Caesars will be required to pay all required/applicable permit and technical service fees.	Caesars is required to pay all required/applicable permit and technical service fees.	Caesars complies with applicable requirements.
AQR Section 25	AQR Section 25  Upset/Breakdown, Malfunctions		Any upset, breakdown, emergency condition, or malfunction in which emissions exceed any permit limit shall be reported to the Control Officer within one (1) hour of onset of such event. Section 25.1 is locally and federally enforceable.	Caesars complies with applicable requirements.
AQR Section 26.1	Emissions of Visible Air Contaminants	Applicable – Opacity for the Caesars combustion units must not exceed 20 percent for more than six (6) minutes.	Compliance determined by EPA Method 9	Caesars complies with applicable requirements.
AQR Section 28	Fuel Burning Equipment	Applicable – The PM emission rate for the combustion turbines and duct burners are well below those established based on Section 28 requirements.	Maximum allowable PM emission rate determined from equation in Section 28.	Caesars complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
AQR Section 40	Prohibition of Nuisance Conditions	Applicable – No person shall cause, suffer or allow the discharge from any source whatsoever such quantities of air contaminants or other material which cause a nuisance. Section 40 is locally enforceable only.	Caesars air contaminant emissions controlled by pollution control devices or good combustion in order not to cause a nuisance.	Caesars complies with applicable requirements.
AQR Section 41.1	Fugitive Dust	Applicable – Caesars shall take necessary actions to abate fugitive dust from becoming airborne.	Caesars utilizes appropriate best practices to not allow airborne fugitive dust.	Caesars complies with applicable requirements.
AQR Section 42	Open Burning	Applicable – In event Caesars burns combustible material in any open areas, such burning activity will have been approved by Control Officer in advance. Section 42 is locally enforceable rule only.	Caesars will contact Air Quality and obtain approval in advance for applicable burning activities as identified in the rule.	Caesars complies with applicable requirements.
AQR Section 43	Odors in the Ambient Air	Applicable – An odor occurrence is a violation if the Control Officer is able to detect the odor twice within a period of an hour, if the odor causes a nuisance, and if the detection of odors is separated by at least fifteen minutes. Section 43 is a locally enforceable rule only.	Caesars will not operate its facility in a manner which will cause odors.	Caesars complies with applicable requirements.
AQR Section 80	Circumvention	Applicable – Caesars shall not conceal emissions in any way.	Caesars will disclose all emissions as required by state and federal regulations.	Caesars complies with applicable requirements.
40 CFR Part 52.21	Prevention of Significant > 250 tpy. Quality mode and a analy		BACT analysis, air quality analysis using modeling, and visibility and additional impact analysis performed for original ATC permits.	Caesars complies with applicable requirements.
40 CFR Part 52.1470	SIP Rules	Applicable – Caesars is classified as a Title V source, and SIP rules apply.	Applicable monitoring and record keeping of emissions data.	Caesars complies with applicable requirements.
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources (NSPS) – General Provisions	Applicable – Caesars is an affected facility under the regulations.	Applicable monitoring, recordkeeping and reporting requirements.	Caesars complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
40 CFR Part 60, Subpart Dc	New Source Performance Standards – Standards of Performance for Small Industrial – Commercial – Institutional Steam Generating Units	Applicable – Caesars has boilers with heat input greater than 10 MMBtu/hr.	Applicable recordkeeping requirements.	Caesars complies with applicable requirements.
40 CFR Part 60	Appendix A, Method 9 or equivalent, (Opacity)	Applicable – Emissions from stacks are subject to opacity standards.	Opacity determined by EPA Method 9.	Caesars complies with applicable requirements.
40 CFR Part 60	Standards of Performance for New Stationary Sources (NSPS) - Subpart IIII	Applicable – Caesars has diesel engines subject to 40 CFR 60, Subpart IIII.	Applicable recordkeeping and reporting requirements.	Caesars complies with applicable requirements.
40 CFR Part 63	Emission Standards for Hazardous Air Pollutants – Subpart ZZZZ	Applicable – Caesars has diesel engines, therefore 40 CFR 63, Subpart ZZZZ applies.	Applicable recordkeeping and reporting requirements.	Caesars complies with applicable requirements.
40 CFR Part 63	Emission Standards for Hazardous Air Pollutants – Subpart CCCCC	Applicable – Caesars has gasoline dispensing, therefore 40 CFR 63, Subpart CCCCCC applies.	Applicable recordkeeping and reporting requirements.	Caesars complies with applicable requirements.
40 CFR Part 70	Federally Mandated Operating Permits	Applicable – Caesars is a major stationary source and under Part 70 the initial Title V permit application was submitted as required. Renewal applications are due between 6 and 18 months prior to expiration. Revision applications will be submitted within 12 months or commencing operation of any new emission unit.	The renewal application was submitted on September 25, 2020. Applications for new units will be submitted within 12 months of startup.	Caesars complies with applicable requirements.

#### Table VI-B-2: Streamlined Requirements

EU	Regulation (40 CFR)	Pollutant	Regulatory Standard	Permit Limit	Is Permit Limit Equal or More Stringent?	Streamlining Statement
FL01 through FL04, BA01 through BA03, CP01 through CP05, CP26, CP27, PA14 through PA16, IP04, IP05, and PH07 through PH09	60.48c(g)(1) (Dc)	NA	record and records of th fuel combus unit durin operatin	e amount of ted in each ng each	Yes	The permit requirements and federal standards are identical

EU	Regulation (40 CFR)	Pollutant	Regulatory Standard	Permit Limit	Is Permit Limit Equal or More Stringent?	Streamlining Statement
FL26, BA17, BA18, CR07, CR08, CP28, CP29, CP34, CP35, IP38, PH13, LI06, LI07, LI12, LI13, and FMC05	60.4205 (IIII)	NOx, PM, and CO	Emission stands NOx + NMH CO (as listed B-1 of this of	C, PM, and in Table IV-	Yes	As testing is not required, DES had determined that operating and maintaining engines per manufacturer's specifications is sufficient to comply with emission standard. Emission standards are listed in this document.
	60.4206 (IIII)	NA	emission sta	Engines must meet the emission standards over the life of the engine		The permit requires the permittee to install and operate the engine according to the manufacturer's specifications or procedures developed by the permittee that are approved by the engine manufacturer.
	60.4207 (IIII)	NA – Fuel Standards	limited to Minimum cet 40 Maximum content of 3	Sulfur in diesel fuel limited to 15 ppm Minimum cetane index of 40 Maximum aromatic content of 35 volume percent		Diesel fuel that does not meet these standards is not available in Clark County, therefore there are no requirements in the Part 70 OP.
	60.4211(f) (IIII)	NA	Operation is limited to 100 hours per year for testing and maintenance and 50 hours per year for nonemergency situations		Yes	The permit requirements and federal standards are identical
HA12 through HA18, FL06, FL09 through FL11, BA04 through BA07, BA11, BA12, CP13 through CP17, PA17, PA18, IP06	63.6604 (ZZZZ)	NA – Fuel Standards	Sulfur in d limited to Minimum cet 40 Maximum content of perc	15 ppm ane index of 0 aromatic 35 volume cent	Yes	Diesel fuel that does not meet these standards is not available in Clark County, therefore there are no requirements in the Part 70 OP.
through IP11, and PH10 through PH12	63.6640 (ZZZZ)	NA	Operation is 100 hours p testing and n and 50 hours nonemergen	per year for naintenance sper year for	Yes	The permit requirements and federal standards are identical

EU	Regulation (40 CFR)	Pollutant	Regulatory Standard	Permit Limit	Is Permit Limit Equal or More Stringent?	Streamlining Statement
CP32	63.11116(a) (CCCCCC)	NA	1. Cover oper contains and seal with company and seal with contains and sea	iners ink fill pipes gasket asoline sent ee collection ems spills and peditiously ed fill pipe from bottom	Yes	The permit requirements and federal standards are identical

#### VII. APPENDIX

Table VII-1: Summary of Insignificant EU or Activities

Description	Rating/Capacity	Manufacturer	Model No.	Serial No.					
Harrah's Las Vegas									
Natural Gas Pool Heater	0.726 MMBtu/hr	Raypak	P-724	1404376451					
Spray Paint Booth	NA	Global Finishing Solutions	FP10812.100	NA					
Dust Collector	4,550 cfm	Murphy-Rodgers	MRM-12- 4D(42B)	1839					
	F	Flamingo Las Vegas							
Dust Collector	2,600 cfm	Murphy-Rodgers	MRM-10-2D	1181					
Abrasive Blast Cabinet	NA	Badboy Blasters, Inc.	BB-3000-XLD	NA					
Diesel UST	8,000 gal	NA	NA	NA					
Diesel UST	1,000 gal	NA	NA	NA					
		Bally's Las Vegas							
Spray Paint Booth	NA	Spray King	200FAFC	659-1					
Abrasive Blast Cabinet w/Dust Collector	NA	Econoline Syphon; Dayton	36-1; 2Z982H	NA					
Dust Collector	NA	Cincinnati Fan and Ventilator Company	100\$	G006678					
Dust Collector	NA	Cincinnati Fan and Ventilator Company	100\$	G006766					
Dust Collector	NA	Cincinnati Fan and Ventilator Company	100\$	G006769					
Dust Collector	NA	Cincinnati Fan and Ventilator Company	100S	G006768					
Dust Collector	NA	Cincinnati Fan and Ventilator Company	100S	G006677					
Diesel AST	12,150 gal <sup>1</sup>	NA	NA	NA					
Diesel UST	2,000 gal	NA	NA	NA					
Diesel AST <sup>2</sup>	300 gal	NA	NA	NA					
Diesel AST <sup>2</sup>	300 gal	NA	NA	NA					
Diesel AST <sup>2</sup>	300 gal	NA	NA	NA					

Caesars Palace								
Spray Paint Booth	NA	Spray King	200-P	NA				
Dust Collector	NA	Pollution International	33N375	NA				
Natural Gas Pool Heater	0.400 MMBtu/hr	Pentair	460775	1118310130019Y				
Natural Gas Pool Heater	0.400 MMBtu/hr	Pentair	460775	1118230120110G				
Diesel AST2	575 gal	NA	NA	NA				
Diesel AST2	575 gal	NA	NA	NA				
Natural Gas Boiler (Kitchen)	0.199 MMBtu/hr	Lochinvar	SNR200-100	J10C20021904				
Natural Gas Boiler (Kitchen)	0.199 MMBtu/hr	Lochinvar	SNR200-100	D12C20037269				
, ,	ı	Paris Casino Resort						
Spray Paint Booth	NA	Spray Systems	I-887	NA				
Dust Collector	NA	Donaldson Torit	UMA358K11AD	97-1572				
Natural Gas Boiler	0.39 MMBtu/hr	A.O. Smith	BTR400A-118	1307M001458				
Natural Gas Boiler	0.39 MMBtu/hr	A.O. Smith	BTR400A-118	1027M001734				
Sandblasting Cabinet	NA	NA	NA	NA				
Diesel UST	8,000 gal <sup>1</sup>	NA	NA	NA				
		E LINQ Hotel & Casin	0					
Dust Collector	NA	Air Sentry, Inc.	205D550F	1216				
	1	Planet Hollywood		1				
Natural Gas Boiler	0.650 MMBtu/hr	Lochinvar	CB0645	L008207				
Natural Gas Boiler	0.650 MMBtu/hr	Lochinvar	CB0645	L008208				
Natural Gas Boiler	0.300 MMBtu/hr	Lochinvar	CPN0300	D004949				
Natural Gas Boiler	0.300 MMBtu/hr	Lochinvar	CPN0300	D004950				
Spray Paint Booth	NA	NA	NA	NA				
Dust Collector	1,500 cfm	Torit	RVS15	16600032-001				
Cooking Oil AST <sup>2</sup>	488 gal	NA	NA	NA				
		Battista's	•	•				
Natural Gas Boiler (Kitchen)	0.150 MMBtu/hr	Trane	YCH150C3L0BB	NA				
Natural Gas Boiler (Kitchen)	0.150 MMBtu/hr	Trane	YCH150C3L0BB	NA				
Natural Gas Boiler (Kitchen)	0.150 MMBtu/hr	Trane	YCH150C3L0BB	NA				
Natural Gas Boiler (Kitchen)	0.150 MMBtu/hr	Trane	YCH150C3L0BB	NA				
Natural Gas Boiler (Kitchen)	0.150 MMBtu/hr	Trane	YCH150C3L0BB	NA				
Natural Gas Boiler (Kitchen)	0.075 MMBtu/hr	A.O Smith	BT-100	NA				
Natural Gas Boiler (Kitchen)	0.075 MMBtu/hr	A.O Smith	BT-100	NA				
Natural Gas Boiler (Kitchen)	0.075 MMBtu/hr	A.O Smith	BT-100	NA				

<sup>&</sup>lt;sup>1</sup>Updated unit information. <sup>2</sup>New insignificant activity.

Table VII-2: Removed Insignificant Units and Activities

Description	Rating/Capacity	Manufacturer	Model No.	Serial No.					
Harrah's Las Vegas									
Diesel AST	2,933 gal	NA	NA	NA					
Diesel AST	1,000 gal	NA	NA	NA					
Diesel AST (4 Tanks)	25 gal	NA	NA	NA					
Diesel AST (2 Tanks)	50 gal	NA	NA	NA					
Diesel AST	266 gal	NA	NA	NA					
Diesel AST	572 gal	NA	NA	NA					
	Flamingo	Las Vegas							
Diesel UST	2,500 gal	NA	NA	NA					
	Caesars	Palace							
Diesel AST (3 Tanks)	2,000 gal	NA	NA	NA					
Diesel AST	1,850 gal	NA	NA	NA					
Diesel AST	1,350 gal	NA	NA	NA					
Diesel AST	500 gal	NA	NA	NA					
	The LINQ Ho	tel & Casino							
Diesel AST (2 Tanks)	275 gal	NA	NA	NA					
Diesel AST	200 gal	NA	NA	NA					
Diesel AST	300 gal	NA	NA	NA					
Diesel AST	400 gal	NA	NA	NA					
Diesel AST	650 gal	NA	NA	NA					

Table VII-3: New Emission Unit (EU: IP38)

EU#	IP38		Horsepower:	762		Emission Factor	Control	Potential Emi		sions
Make:	Caterpillar		Hours/Day:	24.0		(lb/hp-hr)	Efficiency	lb/hr	lb/day	ton/yr
Model:	C15		Hours/Year	500	PM10	1.10E-04	0.00%	0.08	2.02	0.02
S/N:					NOx	1.09E-02	0.00%	8.30	199.17	2.07
					СО	2.58E-03	0.00%	1.97	47.17	0.49
Manufac	turer Guarantee	s			SO <sub>2</sub>	1.21E-05	0.00%	0.01	0.22	0.01
PM10	0.05	g/hp-hr ▼			VOC	8.82E-05	0.00%	0.07	1.61	0.02
NOx	4.94	g/hp-hr ▼			HAP	1.10E-05	0.00%	0.01	0.20	0.01
СО	1.17	g/hp-hr ▼								
SO <sub>2</sub>		lb/hp-hr ▼			DOM 2019	)				
voc	0.04	g/hp-hr ▼			Turbochar	ged and after	cooled			
Engine Type: Diesel ▼					Diesel Fue	 el Sulfur Cor	ntent is 15 pp	om (0.0015	i%)	

**Table VII-4: PTE of Modified Emission Units** 

EU#:	BA01, BA02			Emission	Pote	ntial Emis	sions
				Factor			
Make:	Kewanee			(lb/mmBtu)	lb/hr	lb/day	ton/yr
Model:	H3S-750-G02		PM10	0.0075	0.13	3.02	0.55
S/N:			PM2.5	0.0075	0.13	3.02	0.55
			NOx	0.0304	0.51	12.26	2.24
16.8	mmBtu/hr		CO	0.0170	0.29	6.85	1.25
24.0	hr/day		SO <sub>2</sub>	6.00E-04	0.01	0.24	0.04
8760	hr/yr		VOC	0.0054	0.09	2.18	0.40
			HAP	1.90E-03	0.03	0.77	0.14
BACT:		<b>%</b> 02	Lead	4.90E-07	8.24E-06	1.98E-04	3.61E-05
25	ppm NOx	3.0					
23	ppm CO	3.0					
Fuel:	Natural Gas ▼	_					
EU#:	BA03			Emission	Pote	ntial Emis	sions
EU#:	BA03			Emission Factor	Pote	ntial Emis	sions
EU#: Make:	BA03 Kewanee				Pote	ntial Emis	sions ton/yr
Make:			PM10	Factor			
Make:	Kewanee		PM10 PM2.5	Factor (lb/mmBtu)	lb/hr	lb/day	ton/yr
Make: Model:	Kewanee			Factor (lb/mmBtu) 0.0075	<b>lb/hr</b> 0.19	<b>Ib/day</b> 4.52	ton/yr 0.82
Make: Model: S/N:	Kewanee		PM2.5	Factor (lb/mmBtu) 0.0075 0.0075	<b>Ib/hr</b> 0.19 0.19	<b>Ib/day</b> 4.52 4.52	ton/yr 0.82 0.82
Make: Model: S/N:	Kewanee H3S-750-G02		PM2.5 NOx	Factor (lb/mmBtu) 0.0075 0.0075 0.0304	1b/hr 0.19 0.19 0.76	1b/day 4.52 4.52 18.32	ton/yr 0.82 0.82 3.34
Make: Model: S/N: 25.1 24.0	Kewanee H3S-750-G02 mmBtu/hr		PM2.5 NOx CO	Factor (lb/mmBtu) 0.0075 0.0075 0.0304 0.017	0.19 0.19 0.76 0.43	1b/day 4.52 4.52 18.32 10.24	ton/yr 0.82 0.82 3.34 1.87
Make: Model: S/N: 25.1 24.0	Kewanee H3S-750-G02 mmBtu/hr hr/day		PM2.5 NOx CO SO <sub>2</sub>	Factor (lb/mmBtu) 0.0075 0.0075 0.0304 0.017 6.00E-04	0.19 0.19 0.76 0.43 0.02	1b/day 4.52 4.52 18.32 10.24 0.36	ton/yr 0.82 0.82 3.34 1.87 0.07
Make: Model: S/N: 25.1 24.0	Kewanee H3S-750-G02 mmBtu/hr hr/day	%O2	PM2.5 NOx CO SO <sub>2</sub> VOC	Factor (lb/mmBtu) 0.0075 0.0075 0.0304 0.017 6.00E-04 0.0054	0.19 0.19 0.76 0.43 0.02 0.14	1b/day 4.52 4.52 18.32 10.24 0.36 3.25	0.82 0.82 3.34 1.87 0.07 0.59
Make: Model: S/N: 25.1 24.0 8760 BACT:	Kewanee H3S-750-G02 mmBtu/hr hr/day	% <b>O2</b> 3.0	PM2.5 NOx CO SO <sub>2</sub> VOC HAP	Factor (lb/mmBtu) 0.0075 0.0075 0.0304 0.017 6.00E-04 0.0054 1.900E-03	0.19 0.19 0.76 0.43 0.02 0.14 0.05	1b/day 4.52 4.52 18.32 10.24 0.36 3.25 1.14	ton/yr  0.82  0.82  3.34  1.87  0.07  0.59  0.21
Make: Model: S/N: 25.1 24.0 8760 BACT:	Kewanee H3S-750-G02 mmBtu/hr hr/day hr/yr		PM2.5 NOx CO SO <sub>2</sub> VOC HAP	Factor (lb/mmBtu) 0.0075 0.0075 0.0304 0.017 6.00E-04 0.0054 1.900E-03	0.19 0.19 0.76 0.43 0.02 0.14 0.05	1b/day 4.52 4.52 18.32 10.24 0.36 3.25 1.14	ton/yr  0.82  0.82  3.34  1.87  0.07  0.59  0.21
Make: Model: S/N: 25.1 24.0 8760 BACT:	Kewanee H3S-750-G02 mmBtu/hr hr/day hr/yr	3.0	PM2.5 NOx CO SO <sub>2</sub> VOC HAP	Factor (lb/mmBtu) 0.0075 0.0075 0.0304 0.017 6.00E-04 0.0054 1.900E-03	0.19 0.19 0.76 0.43 0.02 0.14 0.05	1b/day 4.52 4.52 18.32 10.24 0.36 3.25 1.14	ton/yr  0.82  0.82  3.34  1.87  0.07  0.59  0.21
Make: Model: S/N: 25.1 24.0 8760 BACT:	Kewanee H3S-750-G02 mmBtu/hr hr/day hr/yr	3.0	PM2.5 NOx CO SO <sub>2</sub> VOC HAP	Factor (lb/mmBtu) 0.0075 0.0075 0.0304 0.017 6.00E-04 0.0054 1.900E-03	0.19 0.19 0.76 0.43 0.02 0.14 0.05	1b/day 4.52 4.52 18.32 10.24 0.36 3.25 1.14	ton/yr  0.82  0.82  3.34  1.87  0.07  0.59  0.21

EU#:	CP01, CP02			Emission	Pote	Potential Emissions		
				Factor				
Make:	Hurst	q		(lb/mmBtu)	lb/hr	lb/day	ton/yr	
Model:	S4-G-800-150		PM10	0.0075	0.27	6.37	1.16	
S/N:			PM2.5	0.0075	0.27	6.37	1.16	
			NOx	0.0352	1.25	29.91	5.46	
35.4	mmBtu/hr		CO	0.0074	0.26	6.29	1.15	
24.0	hr/day		SO <sub>2</sub>	6.00E-04	0.02	0.51	0.09	
8760	hr/yr		VOC	0.0054	0.19	4.59	0.84	
			HAP	1.90E-03	0.07	1.61	0.29	
BACT:		<b>%</b> 02	Lead	4.90E-07	1.74E-05	4.16E-04	7.60E-05	
29	ppm NOx	3.0						
10	ppm CO	3.0						
Fuel:	Natural Gas ▼							
EU#:	CP03, CP04, CP0	05		Emission	Pote	ntial Emis	sions	
EU#:	CP03, CP04, CP0	05		Emission Factor	Pote	ntial Emis	sions	
	CP03, CP04, CP0	05			Pote	ntial Emis	sions ton/yr	
Make:		05	PM10	Factor				
Make:	Burnham	05	PM10 PM2.5	Factor (lb/mmBtu)	lb/hr	lb/day	ton/yr	
Make: Model:	Burnham	05		Factor (Ib/mmBtu) 0.0075	<b>lb/hr</b> 0.25	<b>Ib/day</b> 6.03	ton/yr 1.10	
Make: Model: S/N:	Burnham	05	PM2.5	Factor (lb/mmBtu) 0.0075 0.0075	lb/hr 0.25 0.25	<b>Ib/day</b> 6.03 6.03	ton/yr 1.10 1.10	
Make: Model: S/N:	Burnham 3P80050GBNM	05	PM2.5 NOx	Factor (lb/mmBtu) 0.0075 0.0075 0.0365	1b/hr 0.25 0.25 1.22	6.03 6.03 29.32	ton/yr 1.10 1.10 5.35	
Make: Model: S/N: 33.5 24.0	Burnham 3P80050GBNM mmBtu/hr	05	PM2.5 NOx CO	Factor (lb/mmBtu) 0.0075 0.0075 0.0365 0.0074	0.25 0.25 1.22 0.25	6.03 6.03 29.32 5.95	ton/yr 1.10 1.10 5.35 1.08	
Make: Model: S/N: 33.5 24.0	Burnham 3P80050GBNM mmBtu/hr hr/day	05	PM2.5 NOx CO SO <sub>2</sub>	Factor (lb/mmBtu) 0.0075 0.0075 0.0365 0.0074 6.00E-04	1b/hr 0.25 0.25 1.22 0.25 0.02	6.03 6.03 29.32 5.95 0.48	ton/yr 1.10 1.10 5.35 1.08 0.09	
Make: Model: S/N: 33.5 24.0	Burnham 3P80050GBNM mmBtu/hr hr/day	05 % <b>02</b>	PM2.5 NOx CO SO <sub>2</sub> VOC	Factor (lb/mmBtu) 0.0075 0.0075 0.0365 0.0074 6.00E-04 0.0054	0.25 0.25 1.22 0.25 0.02 0.18	6.03 6.03 29.32 5.95 0.48 4.34	ton/yr 1.10 1.10 5.35 1.08 0.09 0.79	
Make: Model: S/N: 33.5 24.0 8760 BACT:	Burnham 3P80050GBNM mmBtu/hr hr/day		PM2.5 NOx CO SO <sub>2</sub> VOC HAP	Factor (lb/mmBtu) 0.0075 0.0075 0.0365 0.0074 6.00E-04 0.0054 1.900E-03	1b/hr 0.25 0.25 1.22 0.25 0.02 0.18 0.06	1b/day 6.03 6.03 29.32 5.95 0.48 4.34 1.53	ton/yr 1.10 1.10 5.35 1.08 0.09 0.79 0.28	
Make: Model: S/N: 33.5 24.0 8760 BACT: 30	Burnham 3P80050GBNM mmBtu/hr hr/day hr/yr	%O2	PM2.5 NOx CO SO <sub>2</sub> VOC HAP	Factor (lb/mmBtu) 0.0075 0.0075 0.0365 0.0074 6.00E-04 0.0054 1.900E-03	1b/hr 0.25 0.25 1.22 0.25 0.02 0.18 0.06	1b/day 6.03 6.03 29.32 5.95 0.48 4.34 1.53	ton/yr 1.10 1.10 5.35 1.08 0.09 0.79 0.28	
Make: Model: S/N: 33.5 24.0 8760 BACT: 30	Burnham 3P80050GBNM  mmBtu/hr hr/day hr/yr	% <b>02</b> 3.0	PM2.5 NOx CO SO <sub>2</sub> VOC HAP	Factor (lb/mmBtu) 0.0075 0.0075 0.0365 0.0074 6.00E-04 0.0054 1.900E-03	1b/hr 0.25 0.25 1.22 0.25 0.02 0.18 0.06	1b/day 6.03 6.03 29.32 5.95 0.48 4.34 1.53	ton/yr 1.10 1.10 5.35 1.08 0.09 0.79 0.28	
Make: Model: S/N: 33.5 24.0 8760 BACT: 30	Burnham 3P80050GBNM  mmBtu/hr hr/day hr/yr	% <b>02</b> 3.0	PM2.5 NOx CO SO <sub>2</sub> VOC HAP	Factor (lb/mmBtu) 0.0075 0.0075 0.0365 0.0074 6.00E-04 0.0054 1.900E-03	1b/hr 0.25 0.25 1.22 0.25 0.02 0.18 0.06	1b/day 6.03 6.03 29.32 5.95 0.48 4.34 1.53	ton/yr 1.10 1.10 5.35 1.08 0.09 0.79 0.28	

EU#:	IP01, IP02, IP03			Emission	Potential Emissions			
Make:	Ajax			Factor (lb/mmBtu)	lb/hr	lb/day	ton/yr	
Model:	WG-1250 D		PM10	0.0075	0.01	0.23	0.04	
S/N:			PM2.5	0.0075	0.01	0.23	0.04	
			NOx	0.0488	0.06	1.46	0.27	
1.3	mmBtu/hr		СО	0.0817	0.10	2.45	0.45	
24.0	hr/day		SO <sub>2</sub>	6.00E-04	0.01	0.02	0.01	
8760	hr/yr		voc	0.0054	0.01	0.16	0.03	
			HAP	1.900E-03	0.01	0.06	0.01	
BACT:		<b>%</b> 02	Lead	4.90E-07	6.13E-07	1.47E-05	2.68E-06	
40	ppm NOx	3.0						
111	ppm CO	3.0						
Fuel:	Natural Gas 🔻							